## **Focus on Water Availability**



**Water Resources Program** 

**Revised August 2012** 

# Puyallup-White Watershed, WRIA 10

This focus sheet provides information on the availability of water for new uses in the Puyallup-White Watershed. This information provides a starting point for potential water users in determining the best strategies for securing water for a future project or proposal in this area.

The Puyallup-White Watershed (Water Resources Inventory Area, WRIA, 10) is located in western Washington. This watershed includes three major rivers, the Puyallup, White, and Carbon, all of which originate from glaciers on Mt. Rainier.

The annual precipitation in the Puyallup-White Watershed ranges from 30 to 40 inches per year in the greater Tacoma area to over 120 inches in the Cascade Mountains. Only a fraction of this precipitation becomes available for human and economic uses. Most of the precipitation arrives during the winter months, when water demands are the lowest. During the summer, the snowpack is gone, there is little rain, and naturally low stream flows are dependent on late summer glacial melting and groundwater. This means that groundwater and surface water are least available when water demands are the highest.

## **Factors affecting water availability**

This watershed is one of the most intensely populated and farmed basins in western Washington, and much of the water in the Puyallup-White Watershed has already been spoken for. There is limited water available for new uses, especially because river levels need to be maintained to ensure adequate water quality and fish migration. Increased demands from population growth, naturally low summer and early fall stream flow levels, and impacts from climate change add to the challenge of finding new water supplies in WRIA 10.

#### **Instream Resources Protection Program rule**

WRIA 10 has an Instream Resources Protection Program rule (WAC 173-510, see last page of this document). The rule establishes instream flows on the Upper and Lower Puyallup River and the Carbon River, including all tributaries. All future water withdrawals are subject to the instream flows. All water uses that impact surface waters will be interrupted when stream flows fall below levels set in rule, unless the impacts are offset through mitigation.



#### **Definitions**

Instream flow: A stream flow protected in a rule. These rules specify the amount of water needed in a particular place for a defined time, and typically follow seasonal variations. They are the flow levels needed in the river to protect and preserve instream resources and uses.

**Mitigation plan**: A scientifically-sound plan to offset the impacts of a proposed new water use.

**Seawater intrusion**: The movement of salt water into freshwater aquifers.

## **Water Resources Program**

There is a need to better address instream flows in the Carbon River. No new permits will be issued in the Carbon River subbasin until the rule is amended.

#### **Closures**

WAC 173-510 closes certain streams to all new withdrawals, and partially closes others.

#### **Indian Tribes' review**

Both the Muckleshoot and Puyallup Indian Tribes are very concerned about maintaining flows and fish habitat in the watershed. By request, Ecology notifies the tribes of all new water right applications and decisions.

#### **Seawater intrusion near Puget Sound**

Water uses in some areas near Puget Sound may have the potential for seawater intrusion. Coastal applicants may need to develop an adequate mitigation plan to address this risk.

## Water supply available for new uses

Potential water supplies for new uses in the Puyallup-White watershed include existing municipal suppliers and private water companies.

The groundwater permit exemption allows users of small quantities of groundwater (most commonly, single residential well owners) to construct wells and develop their water supplies without obtaining a water right permit from Ecology. For more information about the groundwater permit exemption, refer to <a href="https://fortress.wa.gov/ecy/publications/summarypages/fwr92104.html">https://fortress.wa.gov/ecy/publications/summarypages/fwr92104.html</a>.

If you are not able to connect to an existing system, or more water is needed than can be obtained from a permit exempt well, then the water right application may be processed through the Cost Reimbursement Program. (See <a href="https://fortress.wa.gov/ecy/publications/SummaryPages/0511016.html">https://fortress.wa.gov/ecy/publications/SummaryPages/0511016.html</a>). You will likely need to develop a mitigation strategy to offset any impacts your water use will have on surface waters.

For more information on other options, refer to "Alternatives for Water Right Application Processing" <a href="https://fortress.wa.gov/ecy/publications/SummaryPages/1111067.html">https://fortress.wa.gov/ecy/publications/SummaryPages/1111067.html</a>.

## Pending water right applications in this watershed

Washington water law is based on the "prior appropriation" system, often called "first in time, first in right." Applications for water from the same source must be processed in the order they are received.

Ecology asks anyone who needs a water right (new, change, or transfer) to submit the pre-application consultation form and meet with us to review your water supply needs and project proposal.

## **Water Resources Program**

- Apply for a New Water Right http://www.ecy.wa.gov/programs/wr/rights/newrights.html
- Apply to Change or Transfer a Water Right or Claim <a href="http://www.ecy.wa.gov/programs/wr/rights/change\_transfer\_use.html">http://www.ecy.wa.gov/programs/wr/rights/change\_transfer\_use.html</a>

The map in this document shows some of the factors that will be considered when evaluating water right permit applications. Here are some information sources to assist you with your research:

- Locate and research water rights on land parcels anywhere in the state (Water Resource Explorer) <a href="http://www.ecy.wa.gov/programs/wr/info/webmap.html">http://www.ecy.wa.gov/programs/wr/info/webmap.html</a>
- Pending Water Right Applications by County http://www.ecy.wa.gov/programs/wr/rights/tracking-apps.html
- Subscribe to a water right application RSS feed for a county or WRIA http://www.ecy.wa.gov/programs/wr/rights/wr\_app\_rss.html
- WRIA map showing the total number of water right claims, certificates, permits and applications <a href="http://www.ecy.wa.gov/programs/wr/rights/Images/pdf/waterright-wria-maps.pdf">http://www.ecy.wa.gov/programs/wr/rights/Images/pdf/waterright-wria-maps.pdf</a>
- Search and view well reports using a variety of search tools
  https://fortress.wa.gov/ecy/waterresources/map/WCLSWebMap/default.aspx

#### For more information

Puyallup-White River Basin Instream Resources Protection (WAC 173-510): <a href="https://fortress.wa.gov/ecy/publications/summarypages/80IRPP10.html">https://fortress.wa.gov/ecy/publications/summarypages/80IRPP10.html</a>

Southwest Regional Office Water Resources Program PO Box 47775 Olympia, WA 98504-7775 360-407-6300

If you need this document in a version for the visually impaired, call the Water Resources Program at 360-407-6872. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

